US Army Corps of Engineers

Norfolk District

JAMES RIVER FEDERAL NAVIGATION PROJECT
Permit Status and
Overview of Environmental Issues

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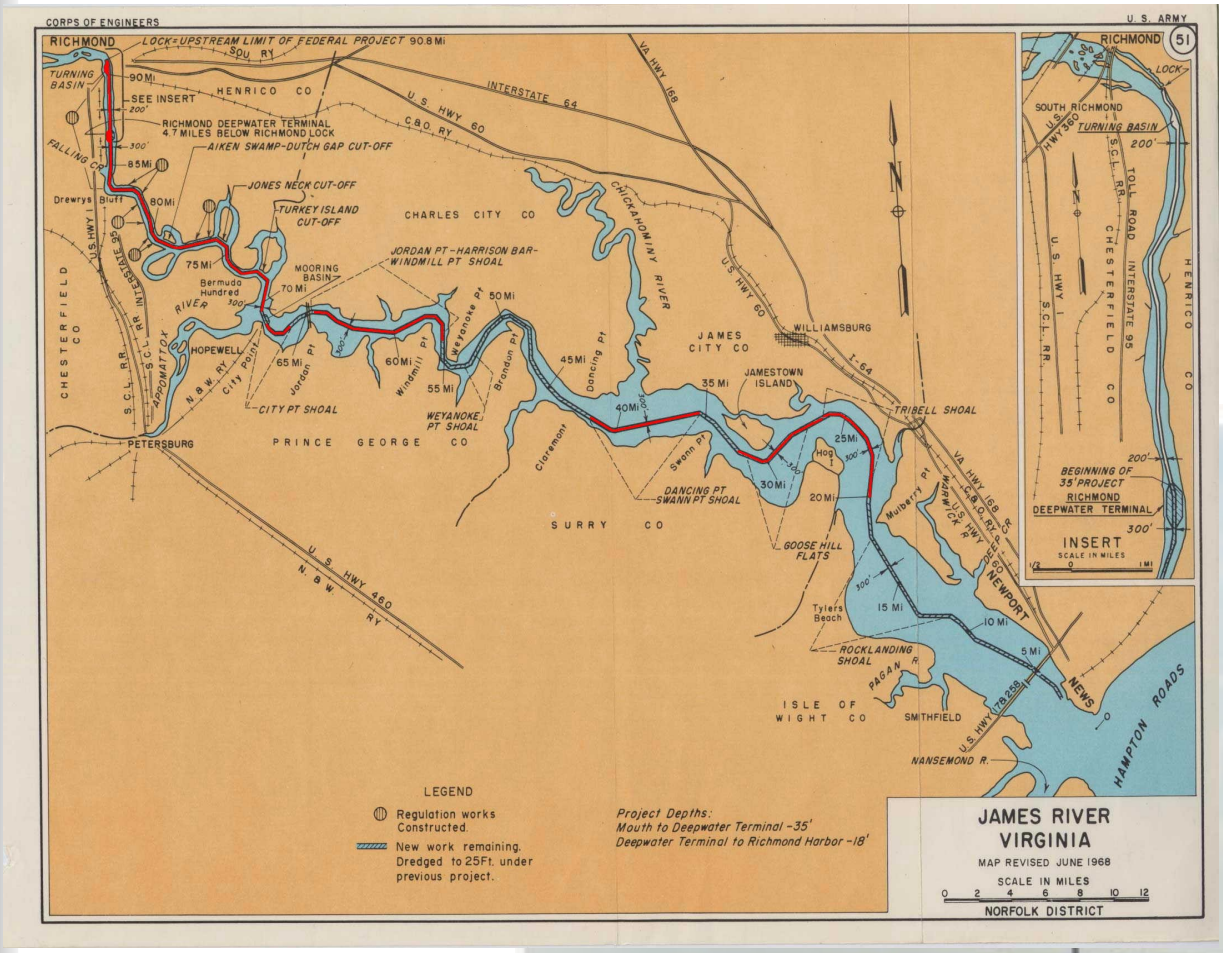
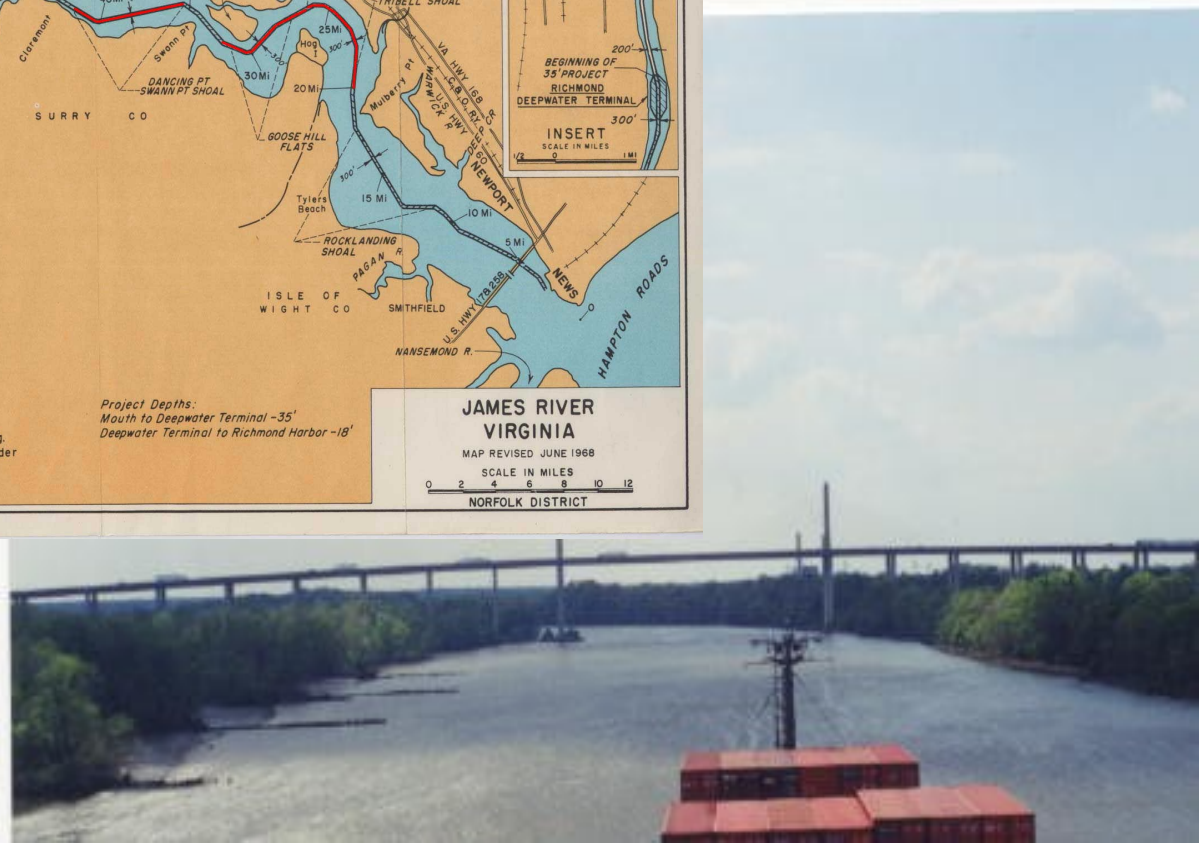
Technical Support Section
Operations Branch

James River


CORPS OF ENGINEERS
U. S. ARMY
RICHMOND
LOCK=UPSTREAM LIMIT OF FEDERAL PROJECT 90.8 Mi
SOU RY
TURNING BASIN
90 Mi
SEE INSERT
HENRICO CO
INTERSTATE 64
U S HWY 60
C&O RY
VA HWY 156
RICHMOND DEEPWATER TERMINAL 4.7 MILES BELOW RICHMOND LOCK
AIKEN SWAMP-DUTCH GAP CUT-OFF
FALLING CR
85 Mi
JONES NECK CUT-OFF
Drewrys Bluff
80 Mi
TURKEY ISLAND CUT-OFF
CHARLES CITY CO
CHICKAHOMINY RIVER
75 Mi
Bermuda Hundred
MOORING BASIN
70 Mi
JORDAN PT-HARRISON BAR-WINDMILL PT SHOAL
RIVER
50 Mi
Weyanoke Pt
Brandon Pt
Dancing Pt
JAMES CITY CO
WILLIAMSBURG
I-64
CHESTERFIELD CO
S.C.L. RR
APPOMATTOX
HOPEWELL
N&W RY
City Point
65 Mi
Jordan Pt
60 Mi
Windmill Pt
55 Mi
45 Mi
35 Mi
JAMESTOWN ISLAND
CITY PT SHOAL
WEYANOKE PT SHOAL
PETERSBURG
PRINCE GEORGE CO
40 Mi
Claremont
Swann Pt
TRIBELL SHOAL
25 Mi
Hog
30 Mi
20 Mi
DANCING PT-SWANN PT SHOAL
Mulberry Pt
Hopewick Pt
SURRY CO
GOOSE HILL FLATS
NEWPORT NEWS
15 Mi
10 Mi
5 Mi
Tylers Beach
ROCKLANDING SHOAL
PAGAN R.
ISLE OF WIGHT CO
SMITHFIELD
U.S. HWY 258
NANSEMOND R.
HAMPTON ROADS
U.S. HWY 460
N & W RY
RICHMOND
51
LOCK
SOUTH RICHMOND
U.S. HWY 360
TURNING BASIN
200'
S.C.L. RR.
TOLL ROAD
INTERSTATE 95
U.S. HWY 1
S.C.L. RR.
CHESTERFIELD CO
HENRICO CO
BEGINNING OF 35' PROJECT
RICHMOND DEEPWATER TERMINAL
300'
INSERT
SCALE IN MILES
LEGEND
Regulation works Constructed.
New work remaining. Dredged to 25Ft. under previous project.
Project Depths:
Mouth to Deepwater Terminal -35'
Deepwater Terminal to Richmond Harbor -18'
JAMES RIVER
VIRGINIA
MAP REVISED JUNE 1968
SCALE IN MILES
0 2 4 6 8 10 12
NORFOLK DISTRICT



There are two main things the Corps must have from the state environmental agencies to continue to dredge the channels:

- DEQ 401 Water Quality Certification

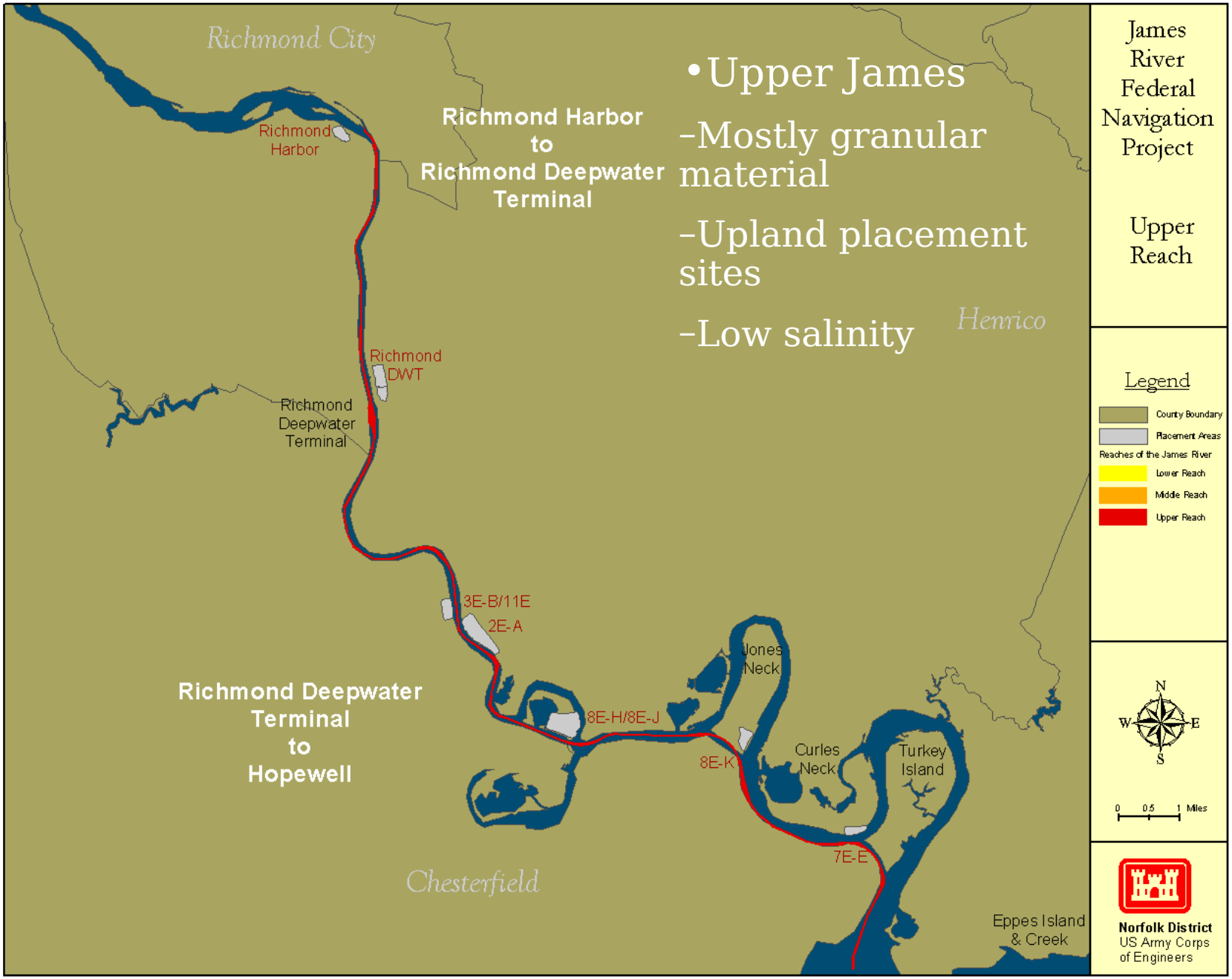
- VMRC permit

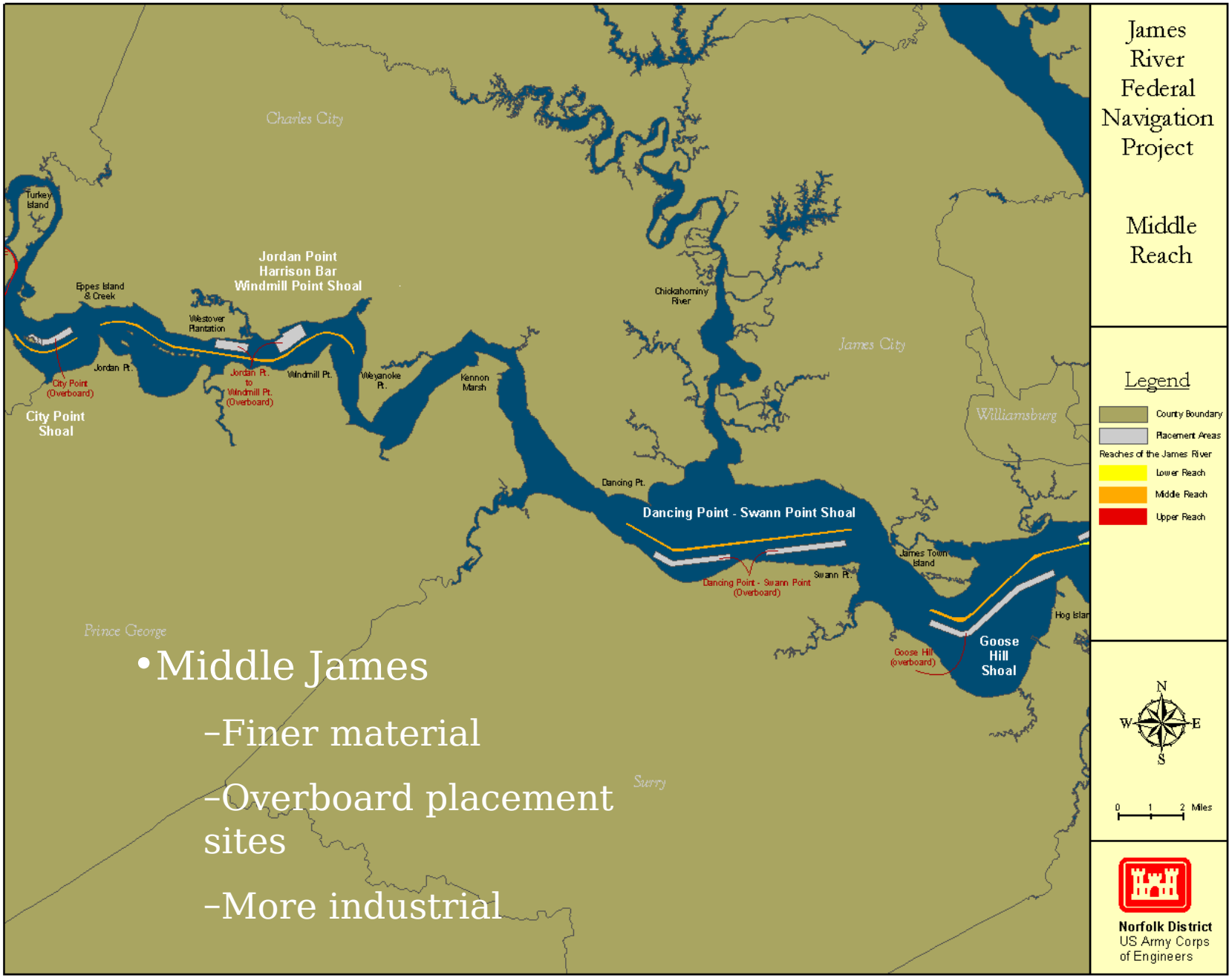
For permitting purposes, the 90 mile James River navigation channel is separated into three parts:

- Upper – Mile 90 to mile 70 (Richmond Harbor to Hopewell)
- Middle – Mile 69 to mile 27 (Hopewell to Hog Island)
- Lower – Mile 27 to mile 5 (Hog Island to the river mouth)

Each of these channel segments has distinct engineering and environmental characteristics that made separation into three permits logical.

For example:


Richmond City
Richmond Harbor
Richmond Harbor to Richmond Deepwater Terminal
Richmond DWT
Richmond Deepwater Terminal
3E-B/11E
2E-A
Richmond Deepwater Terminal to Hopewell
8E-H/8E-J
8E-K
Jones Neck
Curles Neck
Turkey Island
7E-E
Chesterfield
Henrico
Eppes Island & Creek
• Upper James
–Mostly granular material
–Upland placement sites
–Low salinity
James River Federal Navigation Project
Upper Reach
Legend
County Boundary
Placement Areas
Reaches of the James River
Lower Reach
Middle Reach
Upper Reach
N
W
E
S
0 0.5 1 Miles
Norfolk District
US Army Corps of Engineers



- Middle James
  - –Finer material
  - –Overboard placement sites
  - –More industrial

Tribell Shoal (overboard)
Tribell Shoal
Hog Island
Skiffes Creek
Warwick River
Ft. Eustis
Newport News
Rocklanding Shoal
•Lower James
–Fine material
–Higher salinity
–Oyster grounds
–Wider river
James River Federal Navigation Project
Lower Reach
Legend
County Boundary
Placement Areas
Reaches of the James River
Lower Reach
Middle Reach
Upper Reach
N
W
E
S
0 0.5 1 Miles
Norfolk District
US Army Corps of Engineers

The VMRC permit must be renewed every 5 years and the DEQ 401 Certification every 10 years.

Last year at our meeting, we were waiting on the DEQ 401 Certifications for the Upper and Middle segments and the VMRC permit for the Middle segment.

Good News to Report!!

Upper James

401 Certificate was renewed and now
expires December 21, 2014.

Middle James

401 Certificate was renewed and now expires June 1, 2014.

Middle James

VMRC permit was renewed and now expires July 4, 2009.

PERMITS NEEDED NOW

Two renewals are needed for the Lower James River within the next year.

Lower James

401 Certificate
- expires March 2006

VMRC permit
- expires July 2005

Lower James

A new application was submitted in February 2005 for new DEQ and VMRC Permits.

What’s Different with our New Permits/Certifications?

- New testing requirements
- Additional submittals
- Photo documentation

PERMIT CONDITIONS

The two new DEQ 401 Certifications for the Upper and Middle James River require sediment and water testing, as well as submittal of other information, before dredging can begin.

Upper James DEQ permit conditions:

Sediment & Elutriate Sampling & Analysis

- heavy metals
- Naphthalene
- total PCB
- TPH
- TBT

Notification to Virginia American Water Company (milepost 70 – 78).

Upper James DEQ permit conditions Continued:

- Coordination with the Department of Game & Inland Fisheries for bald eagle nests
- Dissolved oxygen readings once daily during July – October
- Submit plans & specifications
- Prepare construction monitoring report
- Submit before and after dredging surveys
- Set up photo stations before, during, and after dredging

Middle James DEQ permit conditions:

- Sediment & Elutriate Sampling & Analysis
  - Jordan Point - Harrison Bar - Windmill Point:
    - Total PCB
  - City Point Shoal:
    - heavy metals
    - Naphthalene
    - total PCB
    - TPH
    - TBT

Middle James DEQ permit conditions:

- Coordination with DGIF for bald eagle nests
- Dissolved oxygen readings once daily during July – October
- Submit plans & specifications
- Prepare construction monitoring report
- Submit before and after dredging surveys
- Set up photo stations before, during, and after dredging

Sediment and Water Testing Upper and Middle James River February 2005

- Sampling and Analysis Plan was approved by DEQ January 28, 2005.

- Sampling commenced 1 week after DEQ approval (February 6th – 12th)
  - Upper James - 15 sample locations
  - Middle James – Windmill Point reach – 14 locations

- Chemical lab results will be submitted to DEQ prior to dredging later this year.

STL

STL
STL
STL

ELIZABETH

ELIZABETH
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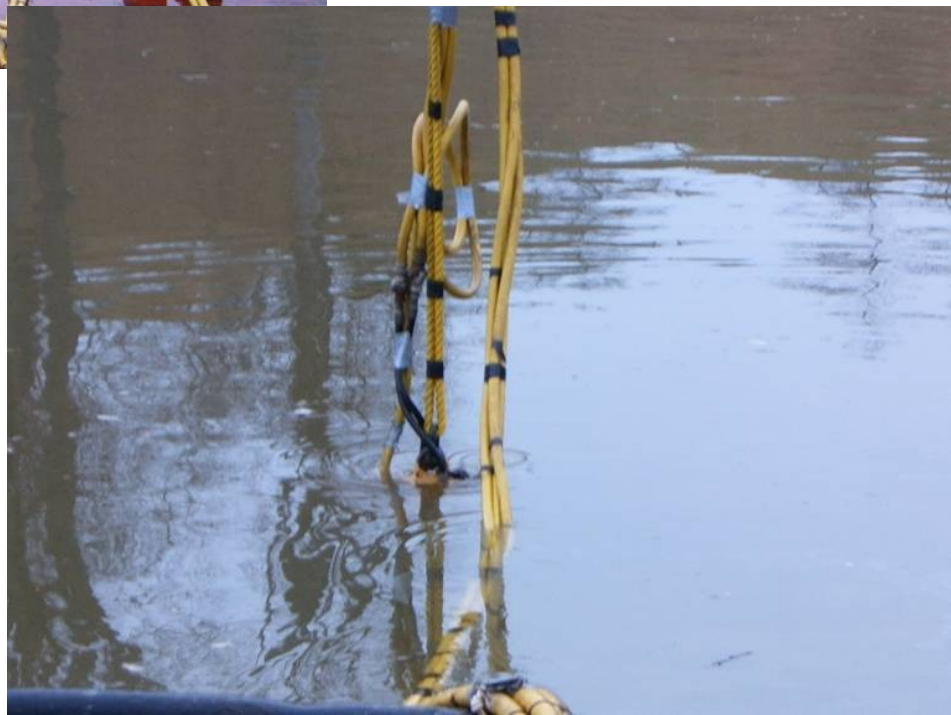

Conclusions:

- 3 necessary environmental permits were obtained this past year.
- 2 more permits are in the process of being renewed for the Lower James.
- Permits obtained this year for the Upper and Middle James include sediment and water testing before dredging can begin.
- Testing was done in February 2005 for shoals to be dredged this summer. Results are not yet available.

US Army Corps of Engineers

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Thank You